Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of aligning a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to match the marker on the first image with the marker on the second image; ~~and~~

blending an overlap section of the first image and the second image, including providing a smooth transition between the first image and second image by selectively providing from 0% to 100% of the second image; and

computing an absolute difference value between the pixel intensities of the overlapping portions of the first and second images to validate alignment between the first and second images.

2. (Original) The method of claim 1 comprising realigning at least one of the first image and second image if it is determined that the first and second images are misaligned.

3. (Original) The method of claim 1 wherein the first and second images are obtained from a digital radiography device.

4. (Canceled)

5. (Currently amended) ~~The method of claim 4 wherein blending comprises:~~ A method of aligning a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to match the marker on the first image with the marker on the second image;

blending an overlap section of the first image and the second image; and

computing an absolute difference value between the pixel intensities of the overlapping portions of the first and second images to validate alignment between the first and second images,

the blending comprising:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section a largest pixel intensity of the overlapping pixels from the first image and second image.

6. (Currently amended) ~~The method of claim 4 wherein blending comprises:~~ A method of aligning a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to match the marker on the first image with the marker on the second image;

blending an overlap section of the first image and the second image; and

computing an absolute difference value between the pixel intensities of the overlapping portions of the first and second images to validate alignment between the first and second images,

the blending comprising:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section a smallest computed pixel intensity from the overlapping pixels from the first image and second image.

7. (Currently amended) The method of claim 1 ~~claim 4~~ wherein blending comprises:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section an average pixel intensity of the overlapping pixels of the first and second images in the overlap section.

8. (Currently amended) The method of claim 1 ~~claim 4~~ wherein blending comprises providing a smooth transition between the first image and second image by selectively providing from 0% of the first image to 100% of the first image in the overlap section.

9. (Canceled)

10. (Currently amended) The method of claim 1 ~~claim 4~~ wherein the first and second images comprise a plurality of pixels, each of the pixels having a pixel intensity, wherein in the overlap section a portion of the pixels in the first image overlap a portion of the pixels in the second image, wherein the overlap section comprises a first end and a second end, wherein blending comprises:

displaying 100% of the pixel intensity of the first image at the first end of the overlap section;

displaying 50% of the pixel intensity of the first image with 50% of the pixel intensity of the overlapping pixels of the second image at a halfway point of the overlap section; and

displaying 100% of the pixel intensity of the second image at the second end of the overlap section.

11. (Original) The method of claim 10 wherein blending further comprises displaying pixel intensities from the first image and the second image with a weighting for the combination which changes in a non-linear manner from the first end of the overlap section to the second end of the overlap section.

12. (Original) The method of claim 10 wherein blending further comprises displaying pixel intensities from the first image and the second image with a weighting for the combination which changes in a linear manner from the first end of the overlap section to the second end of the overlap section.

13. (Currently amended) A method of stitching a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to create an overlap section, wherein overlapping matches the marker on the first image with the marker on the second image;

calculating an absolute difference between the pixel intensity values of the overlapping portions of the first and second images in the overlap section so as to validate alignment between the first and second images; ~~and~~

blending the overlap section of the first image and the second image; and

adjusting a position of at least one of the first or second images by a plurality of fixed steps.

14. (Original) The method of claim 13 wherein the first and second images are obtained from a digital radiography device.

15. (Currently amended) ~~The method of claim 13 wherein blending comprises:~~ A method of stitching a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to create an overlap section, wherein overlapping matches the marker on the first image with the marker on the second image;

calculating an absolute difference between the pixel intensity values of the overlapping portions of the first and second images in the overlap section so as to validate alignment between the first and second images; and

blending the overlap section of the first image and the second image, including:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section a largest pixel intensity of the overlapping pixels from the first image and second image.

16. (Currently amended) ~~The method of claim 13 wherein blending comprises:~~ A method of stitching a plurality of images, the method comprising:

providing a marker on a first image and a second image;

overlapping the first image and the second image to create an overlap section, wherein overlapping matches the marker on the first image with the marker on the second image;

calculating an absolute difference between the pixel intensity values of the overlapping portions of the first and second images in the overlap section so as to validate alignment between the first and second images; and

blending the overlap section of the first image and the second image, including:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section a smallest computed pixel intensity from the overlapping pixels from the first image and second image.

17. (Original) The method of claim 13 wherein blending comprises:

computing a pixel intensity of the pixels of first image in the overlap section;

computing a pixel intensity of the pixels of the second image in the overlap section that overlap the pixels of the first image in the overlap section; and

displaying for each pixel in the overlap section an average pixel intensity of the overlapping pixels of the first and second images in the overlap section.

18. (Original) The method of claim 13 wherein blending comprises providing a smooth transition between the first image and second image by selectively providing from 0% of the first image to 100% of the first image in the overlap section.

19. (Original) The method of claim 13 wherein blending comprises providing a smooth transition between the first image and second image by selectively providing from 0% to 100% of the second image.

20. (Original) The method of claim 13 wherein the first and second images comprise a plurality of pixels, each of the pixels having a pixel intensity, wherein in the overlap section a portion of the pixels in the first image overlap a portion of the pixels in the second image, wherein the overlap section comprises a first end and a second end, wherein blending comprises:

displaying 100% of the pixel intensity of the first image at the first end of the overlap section;

displaying 50% of the pixel intensity of the first image with 50% of the pixel intensity of the overlapping pixels of the second image at a halfway point of the overlap section; and

displaying 100% of the pixel intensity of the second image at the second end of the overlap section.

21. (Original) The method of claim 20 wherein blending further comprises displaying pixel intensities from the first image and the second image with a weighting for the combination which changes in a non-linear manner from the first end of the overlap section to the second end of the overlap section.

22. (Original) The method of claim 20 wherein blending further comprises displaying pixel intensities from the first image and the second image with a weighting for the combination which changes in a linear manner from the first end of the overlap section to the second end of the overlap section.

23. (Original) The method of claim 13 wherein the overlap section is black when the overlapping pixels of the first image and the second image have the same pixel intensity.

24. (Original) The method of claim 23 wherein calculating is in real-time.

25. (Original) The method of claim 13 wherein providing a marker comprises marking a first point on the first image and a second point on the second image, and wherein overlapping comprises matching the first and second points and keeping the orientation of the first and second image fixed.

26. (Original) The method of claim 13 wherein providing a marker comprises marking a first point and a first line on the first image and a second point and second line on the second image, wherein superimposing comprises:

matching the first points and second points; and

rotating one of the first and second images so that the first line and second line are parallel.

27. (Original) The method of claim 13 wherein providing a marker comprises marking a first line on the first image and a second line on the second image so that a last point of the first line and a first point of the second line are matched and wherein overlapping comprises rotating at least one of the images so as to make the first line and second line parallel.

28. (Canceled)

29. (Currently amended) The method of claim 13 ~~28~~ wherein the fixed step comprises a one pixel displacement.

30. (Currently amended) The method of claim 13 ~~28~~ wherein the fixed steps comprise a 10 pixel displacement.

31. (Currently amended) The method of claim 13 ~~28~~ wherein adjusting of the position of the image(s) is made in a fixed step by the use of a keyboard key or combination of keys.

32. (Currently amended) The method of claim 13 ~~28~~ wherein the first image is rotated in a plurality of fixed steps by the use of a keyboard key.

33. (Original) The method of claim 32 wherein the steps comprise a one quarter degree rotation.

34. (Original) The method of claim 32 wherein the fixed step comprises a one degree rotation.

35. (Original) The method of claim 32 wherein the fixed step comprises a ten degree rotation.

36. (Currently amended) The method of claim 13 ~~28~~ comprising tracking the position of the moved image in real time.

37. (Currently amended) The method of claim 13 ~~28~~ comprising adjusting a center of rotation of at least one of the first and second image.

38. (Original) The method of claim 37 wherein adjusting comprises clicking and dragging a cursor over a selected image.

39-53. (Canceled)

54. (Original) A method of stitching a plurality of images, the method comprising:

providing a first image and a second image;

allowing a user to choose one of at least two of the following methods of marking:

marking a first point on the first image and a second point on the second image;

marking a first and second point on the first image and a third and fourth point on the second image;

marking a first point and a first line on the first image and a second point and second line on the second image;

marking a first line on the first image and a second line on the second image;

marking the first image and second image with a chosen marker; and

aligning the markers to stitch the first and second images together.

55. (Original) The method of claim 54 wherein marking comprises placing the first point on the first image and the second point on the second image , wherein aligning further comprises keeping the orientation of the first and second image fixed.

56. (Original) The method of claim 54 wherein marking comprises placing the first point and the first line on the first image and the second point and second line on the second image, wherein aligning comprises matching the first points and second points and rotating one of the first and second images so that the first line and second line are parallel.

57. (Original) The method of claim 54 wherein marking comprises placing the first point and second point on the first image and the third point and fourth point on the second image, wherein aligning comprises matching the first point with the third point and rotating one of the first image and second image until the second point and fourth points are matched.

58. (Original) The method of claim 54 wherein marking comprises placing the first line on the first image and the second line on the second image, wherein aligning comprises overlapping the first line and second line so that a last point of the first line and a first point of the second line are matched, wherein at least one of the first and second images are rotated so as to make the first line and second line parallel.

59-61. (Canceled)

62. (Original) A method of measuring an angle of scoliosis, the method comprising:

providing a first radiographic image of at least a portion of the thoracic and upper lumbar spine;

providing a second radiographic image of at least a portion of the lumbar and lower thoracic spine;

stitching the first radiographic image to the second radiographic image; and

measuring an angle of scoliosis on the stitched radiographic image.

63. (Original) The method of claim 62 wherein measuring comprises placing two lines on the radiographic image and measuring the angle between the two lines.

64. (Original) The method of claim 62 wherein measuring comprises:

drawing a line in a disk space between two thoracic vertebrae parallel to an inferior surface of an upper vertebrae;

drawing a second line in a disk space between two lumbar vertebrae, parallel to the inferior surface of an upper lumbar vertebrae;

drawing a line perpendicular to each of the first and second lines such that the lines intersect; and

calculating the angle at an intersection.

65. (Original) The method of claim 62 comprising blending an overlap section of the first radiographic image and the second radiographic image.

66. (Original) The method of claim 65 comprising validating a registration of the first image and second image by displaying an absolute difference between the first image and second image in the overlap section.

67. (Canceled)

68. (Original) A method of stitching a first image and a second image, the method comprising:

providing at least a first marker on a first image and at least a second marker on the second image, wherein the first image and second image comprise a plurality of pixels;

matching the first and second markers, wherein matching overlaps a portion of the first image and a portion of the second image; and

selecting a desired blending method from a plurality of blending methods; and

using the selected blending method to blend the overlapping portions of the first image and second image.